

## REMARKS

Claims 80-136 are pending and patentable over the prior art of record. The excess claims fee of \$1,170.00 for six (6) extra independent claims and thirty seven (37) extra total claims is enclosed.

U.S. Patent No. 6,157,658 to Toyoyama is directed towards the design of an integrated circuit for pointer processing and path overhead (POH) termination in an SDH signal. The idea behind Toyoyama is a more efficient and compact circuit design carrying out these functions. This is set out in the abstract. Figs. 4-6 show block diagrams of tributary unit (TU) pointer processing units.

The present invention involves processing of the path overhead (POH) of virtual containers. The POH processing of the present invention is concerned with converting a signal into a virtually concatenated information structure. This is not disclosed in Toyoyama. In fact, having studied Toyoyama, no trace can be found of any reference to a *virtually* concatenated information structure.

Toyoyama is concerned with a pointer processing apparatus and a path overhead (POH) terminating apparatus implemented in an integrated circuit, the aim being to decrease in the scale of the hardware or power consumption and equipping more functions on one chip than hitherto. The only reference to concatenation that can be found in Toyoyama exists at col. 2, lines 35-39. However, this is no more than an echo of the SDH recommendation G. 707 (e.g., Draft of November 1995, Section 87.1.7.1, page 43) issued by

the ITU and referred to in the introduction to the present application at page 1. The concatenation pointer relates to the art of *contiguous* concatenation. As indicated in the introduction to the present application, contiguous concatenation is comprised in the prior art and is associated with a number of serious disadvantages. In particular, a good proportion of the existing SDH type networks in the world do not have the capacity to handle contiguously concatenated signals, and the modifications to equipment that would be required in order to remedy this are deemed uneconomic.

Advantageously, the invention sets forth a practical alternative to contiguously concatenated data in the form of *virtually* concatenated data. Virtually concatenated data has the advantage that it may be carried on existing SDH networks with only a minimum of modification required.

*Virtually* concatenated data structures are fundamentally different from contiguously concatenated data structures. Whereas contiguously concatenated data structures rely on the use of the pointer and actually remove the entire path overhead information from some of the virtual containers, virtually concatenated data structures according to the present invention preserve all path overhead information. This is set out at page 2 of the description from lines 9-18 and is reflected in the wording of the main claims. In summary, Toyoyama does not teach a viable method of carrying data in the virtually concatenated data structures as provided by the present invention. No reference to virtual concatenation can be found anywhere in Toyoyama. The Examiner's objection is therefore traversed.

U.S. Patent No. 6,011,802 to Norman does not teach a *virtually* concatenated information structure. As with Toyoyama, the present invention is also distinguished from Norman in providing a viable *virtual* concatenated data structure. This data structure is *not* disclosed in Norman, is *not* disclosed in G.707 in the versions available prior to the priority date of the present application, and provides significant advantages over the known contiguously concatenated data structure. The applicant maintains that the Examiner's objections on the basis of Norman are traversed.

Petition is hereby made for a one-month extension of the period to respond to the outstanding Official Action to July 13, 2002. A check in the amount of \$110.00, as the Petition fee, is enclosed herewith. If there are any additional charges, or any overpayment, in connection with the filing of the amendment, the Commissioner is hereby authorized to charge any such deficiency, or credit any such overpayment, to Deposit Account No. 11-1145.

Allowance of all claims is respectfully requested.

Respectfully submitted,

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